APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,906	02/13/2002	Richard Meyer	20949P-000800US	1882

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EXAMINER
BADERMAN, SCOTT T

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/076,906	MEYER ET AL.
	Examiner	Art Unit	
	Scott T Baderman	2113	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2002*.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4-13* is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date 2/13/02 *pg 383*

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities: The serial numbers

for the U.S. patent applications in paragraph 63 are missing. Appropriate correction is required.

Claim Objections

2.   Claims 1, 5-9 and 11 are objected to because of the following informalities:

Claim 1, line 1 - the period needs to be deleted.

Claims 5-8, line 1, respectively, "1" should be "4". Also, in line 1, respectively, "systems

include" should be "server includes".

Claim 9, line 1 "1"should be "4". Also, in lines 1-2 "said networked storage systems" lacks

antecedent basis. Also, in line 3 "said member candidates" lacks antecedent basis. Also, in line

10 "the Failover Service" lacks antecedent basis.

Claim 11, line 1 – the period needs to be deleted.

Appropriate correction is required.

Allowable Subject Matter

3.   Claims 4-13 are allowed. This is contingent on the above objections being overcome.

4.   The following is an examiner's statement of reasons for allowance:

With respect to claim 4, the Examiner asserts that the novelty of the claim, when read as

a whole, is "for each Failover Set, designating one of its member candidates as a Primary,

designating one of its member candidates as a Secondary, and designating remaining member

candidates as Alternates; performing startup processing of the member candidates; and providing

policies for run-time member behavior including fault characterization and detection, health

monitoring, compatibility requirements, corrective action during failover, member restart and re-

integration, and the member failure limit exceeded condition."

With respect to claim 13, the Examiner asserts that the novelty of the claim, when read as

a whole, is "a set of configuration and management software called Services that execute on top

of the Services Framework comprising: a Discovery Service to identify member candidates using

a standard protocol; and a Failover Service to organize the members into various compositions

call Failover Sets, including Single, Hierarchical and N-way compositions; a database

management system to store and synchronize the configuration on all members in the failover

set; an Arbitration Service to determines that one member's role is Primary, one member's role is

Secondary, and the remaining member's roles are Alternates; a Boot Service to coordinate the

member role during startup using the type of boot; and a Policy Manager within the Failover

Service to provide policies for run-time member behavior including fault characterization and

detection, health monitoring, compatibility requirements, corrective action during failover,

member restart and re-integration, and the member failure limit exceeded condition."

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

6.   Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al. (6,609,213).

As in claim 1, Nguyen discloses a storage server in a storage area network connecting a plurality of host computers (Figure 1, elements 14a-d) and a plurality of storage devices (Figure 1, elements 28a-d), said storage server comprising: a plurality of storage processors (Figure 1, elements 32) configured to communicate data with said plurality of host computers and said plurality of storage devices via said storage area network (Figure 1, column 4: line 20 – column5: line 37); a switching circuit connecting said plurality of storage processors (Figure 1, elements 24); a control processor (Figure 1, element 18); first software control means (storage consolidation software) for creating one or more failover sets, each failover set comprising one or more devices (i.e., the multiple servers which serve as a cluster, form a "set") (Figure 1, column 4: line 20 – column 5: line 58); second software control means (via cluster server 18)) for detecting a failure of a first component (column 5: lines 33-58), said first component belonging to a first failure set (i.e., server 14a belongs to the cluster) (column 5: lines 33-58); and third software control means (software consolidation software) for selecting an alternate component belonging to said first failure set, wherein said alternate component replaces the service provided by said first component (column 5: line 33 – column 6: line 31).

As in claims 2 and 3, Nguyen discloses a storage management device for exchanging data between a plurality of computer users and a plurality of storage devices (i.e., the cluster system

described therein is specifically used between users and storage devices) (column 1: line 46 –

column 2: line 9), the storage management device comprising: one or more control modules

(Figure 1, elements 14a-d), each having one or more first data ports (Figure 1, element 20); one

or more storage control modules (Figure 1, elements 32), each having one or more second data

ports (therein); one or more data stores (Figure 1, elements 28); a switch fabric configured to

selectively exchange data among said first data ports and said second data ports (Figure 1,

elements 24, column 5: lines 38-58), some of said first data ports and said second data ports

receiving and transmitting data with said computer users, others of said first data ports and said

second data ports receiving and transmitting data with said storage devices (it is interpreted that

some, if not all, of the data ports in the cluster and storage devices transmit data with users)

(column 1: line 46 – column 2: line 9); and program code (storage consolidation software)

adapted to execute on each of said one or more control modules, said program code comprising:

a first code component configured to operate one of said control modules to define a plurality of

failover sets (i.e., the multiple servers which serve as a cluster, form a "set") (Figure 1, column 4:

line 20 – column 5: line 58), said failover sets comprising combinations of said first and second

data ports and said data stores (i.e., the reassignment process encompasses this) (column 5: lines

38-48); a second code component (cluster server 18) configured to operate one of said control

modules to detect as a failed service a failure of one of said first and second data ports and said

data stores (column 5: line 33-58); and a third code component configured to operate one of said

control modules to identify a failover set associated with said failed service and to identify an

alternate from said associated failover set (column 5: line 33 – column 6: line 31).

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

See form PTO-892.

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Scott T Baderman whose telephone number is (571) 272-3644.

The examiner can normally be reached on Monday-Friday, 6:45 AM-4:15 PM, first Fridays off.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

                                        Scott T Baderman
                                        Primary Examiner
                                        Art Unit 2113

STB